



Docket No.: 1691-0221PUS1

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Weiping ZENG et al.

Application No.: 10/585,991

Confirmation No.: @@@

Filed: July 13, 2006

Art Unit: N/A

For: ADHESIVE FOR DENTAL OR SURGICAL USE

AND POLYMERIZATION INITIATOR COMPOSITION FOR THE SAME

Examiner: Not Yet Assigned

LETTER

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Attached is a copy of the Notification of Transmittal of copies of Translation of the International Preliminary Examination Report mailed October 26, 2006. Please make this of record in the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §1.16 or 1.14; particularly, extension of time fees.

Dated:

FEB 2 2007

Respectfully submitted,

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Attorney for Applicant

Attachment(s)

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

14 January 2005 (14.01.2005)

PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)

(PCT Rules 44bis.3(c) and 72.2)

OHSHIMA, Masataka
Ohshima Patent Office
Fukuya Bldg.
3, Yotsuya 4-chome
Shinjuku-ku, Tokyo 160-0004

OHSHIMA PATENT
OFFICE

Date of mailing (day/month/year)
26 October 2006 (26.10.2006)

Applicant's or agent's file reference
G49SUN

International application No.

International filing date (day/month/year)

Applicant

PCT/JP2005/000722

SUN MEDICAL CO., LTD. et al

| l. | Transmittal | of th | e translation | to | the a | pplicant. |
|----|-------------|-------|---------------|----|-------|-----------|
|----|-------------|-------|---------------|----|-------|-----------|

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

EP, KR

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Yoshiko Kuwahara

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Facsimile No. +41 22 338 82 70 Form PCT/IB/338 (January 2004)

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PATENT COOPERATION TREATY

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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|---|---|------------------------|-------------------------|--------------------------------|---|--|
| Applicant's or agent's file reference jp05722 | | | FOR FURTHER | ACTION | See Form PCT/IPEA/416 | |
| International application No. | | International filing d | ate (day/month/year) | Priority date (day/month/year) | | |
| PCT/JP2005/000722 | | 14.01.2005 | | 15.01.2004 | | |
| International P | atent Classification | on (IPC) or nati | onal classification and | IPC | | |
| A61K6/ | 00, C09J | 14/00, 4 | 4/02, 11/0 | 6 | | |
| Applicant | Applicant | | | | | |
| SUN MEDICAL CO., LTD. | | | | | | |
| | | | | | | |
| This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. | | | | | | |
| 2. This | REPORT consists | of a total of | 4 | sheets, includi | ing this cover sheet | |
| | | _ | NNEXES, comprising | | | |
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| a. L | | | | ureau) a total of | | |
| | sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). | | | | | |
| | sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental | | | | | |
| г | Box. | | | | | |
| b | (sent to the | International l | Bureau only) a total of | (indicate type and numb | per of electronic carrier(s)) | |
| | | | | | , containing a sequence listing and/or tables | |
| | related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions). | | | | | |
| 4. This | report contains inc | dications relatio | ng to the following ite | ms: | | |
| \boxtimes | Box No. I | Basis of the | report | | | |
| | Box No. II | Priority | - | | | |
| 一 | Box No. III | • | hment of opinion with | | ntive step and industrial applicability | |
| 一 | | | | regard to hoverry, inver | nive step and industrial applicability | |
| | Box No. IV | | y of invention | | | |
| | Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | | | | elty, inventive step or industrial applicability; | |
| ᆜ | Box No. VI | Certain docu | ments cited | | | |
| | Box No. VII Certain defects in the international application | | | | | |
| | Box No. VIII Certain observations on the international application | | | | | |
| Date of submission of the demand Date of completion of this report | | | | | | |
| Date of Submis | sion of the denian | u | | Date of completion of t | msreport | |
| Name and mail | ing address of the | IPEA/IP | | Authorized officer | | |
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/000722

| Во | x No. I | Basis of the report | | | | |
|----|---|---|---|--|--|--|
| 1. | With re | regard to the language, this report is based on the internation ted under this item. | al application in the language in which it was filed, unless otherwise | | | |
| | | This report is based on translations from the original languag | | | | |
| | — " | which is the language of a translation furnished for the purpo | ses of: | | | |
| | F | international search (Rule 12.3 and 23.1(b)) publication of the international application (Rule 12.4) | | | | |
| | Ē | international preliminary examination (Rule 55.2 and/o | | | | |
| 2. | With re | · | report is based on (replacement sheets which have been furnished to the | | | |
| | receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed this report): | | | | | |
| | \square | the international application as originally filed/furnished | | | | |
| | | the description: | | | | |
| l | pa | pages | as originally filed/furnished | | | |
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| | _ | | received by this Authority on | | | |
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| | L th | the drawings: | • | | | |
| | sh | sheets | as originally filed/furnished | | | |
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| | sh | sheets* | received by this Authority on | | | |
| | a | a sequence listing and/or any related table(s) - see Supplemen | ntal Box Relating to Sequence Listing. | | | |
| 3. | T | The amendments have resulted in the cancellation of: | | | | |
| | | the description, pages | | | | |
| | | the claims, nos. | | | | |
| | | the drawings, sheets/figs | | | | |
| | | | | | | |
| | Ē | any table(s) related to sequence listing (specify): | | | | |
| 4. | — тı | | nents annexed to this report and listed below had not been made, since | | | |
| | th را | hey have been considered to go beyond the disclosure as file | d, as indicated in the Supplemental Box (Rule 70.2(c)). | | | |
| | <u></u> | the description, pages | | | | |
| | L | the claims, nos. | | | | |
| | Ļ | the drawings, sheets/figs | | | | |
| | L | the sequence listing (specify): | | | | |
| | | any table(s) related to sequence listing (specify): | | | | |
| * | If item 4 | 4 applies, some or all of those sheets may be marked "super | seded." | | | |

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/000722

| Box No. V Reasoned statement under A citations and explanations su | | | rticle 35(2) with regard to novelty, inventive step or industrial applicability; pporting such statement | |
|--|-------------------------------|--------|--|-----|
| 1. | Statement | | | |
| | Novelty (N) | Claims | | YES |
| | | Claims | 1-7 | NO |
| | Inventive step (IS) | Claims | | YES |
| | | Claims | 1-7 | NO |
| | Industrial applicability (IA) | Claims | 1-7 | YES |
| | | Claims | | NO |
| | | | | |

2. Citations and explanations (Rule 70.7)

Document 1: JP 05-253284 A (Mitsui Petrochemical Industries, Ltd.)

Document 2: JP 09-110913 A (San Medical Kabushiki Kaisha)

Document 3: JP 9-309811 A (Tokuyama Corporation)

(1) Novelty

The invention set forth in claims 1 to 7 lacks novelty in the light of document 1. Document 1 indicates that a polar organic compound and an inactive diluent are contained in specific quantities in relation to a hardener.

(2) Inventive Step

The invention set forth in claims 1 to 7 does not involve an inventive step in the light of document 1. It would be easy for a person skilled in the art to have a polar organic compound and an inactive diluent contained in specific quantities with respect to a hardener in the invention set forth in document 1 to constitute a polymerization initiating composition.

The invention set forth in claims 1 to 7 does not involve an inventive step in the light of documents 1, 2 and 3. Document 2 sets forth a polymerization initiating composition with improved safety with respect to catching

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/000722

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

fire, comprising an organic boron compound and an aprotic solvent. Document 3 sets forth a dental adhesive composition containing an arylborate compound and an organic solvent. The inventions set forth in documents 1 to 3 belong to the common technical field of dental adhesive compositions containing organic boron compounds, therefore it would be easy for a person skilled in the art to have the organic boron compound set forth in document 2 serve as the hardener set forth in document 1, and the aprotic solvent set forth in document 2 and the organic solvent set forth in document 3 serve as the polar organic compound and inactive diluent set forth in document 1, in order to provide the composition with the desired characteristics, and thereby constitute a polymerization initiating composition.